

PATENT COOPERATION TREATY
PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 12177772/VPA	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/AU03/01133	International filing date (day/month/year) 3 September 2003	(Earliest) Priority Date (day/month/year) 3 September 2002
Applicant BIOPROSPECT LIMITED et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title, ☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

EREMOPHILONE AND EREMOPHILONE DERIVATIVES FOR PEST CONTROL

5. With regard to the abstract, ☒ the text is approved as submitted by the applicant

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure

☐ because this figure better characterizes the invention

☐ None of the figures

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01133

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos : **Claims 1-3, 7-8, 12, 16-28, 32-33, 37, 41-60, 64-65, 69, 73-79 (all partially)**
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
See supplementary sheet
3. ☐ Claims Nos :
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
- ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01133

A. CLASSIFICATION OF SUBJECT MATTERInt. Cl. ⁷: A01N 35/02, 65/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EREMOPHIL?, PEST, INSECT, BIOCIDES, TERMITE, FUNGI, SUB-STRUCTURE SEARCH (BASED ON EXAMPLES)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Palombo E. et al, "Antibacterial activity of traditional Australian medicinal plants" Journal of Ethnopharmacology Vol 77 (2001) p 151-157 (definition of pest in international application includes bacteria and viruses)	1-44, 47
X	Semple SJ et al, "Screening of Australian medicinal plants for antiviral activity" Journal of Ethnopharmacology Vol 60 (1998) p 163-172	1-44, 47
X	WO 02/50053 A (US DEPARTMENT OF HEALTH AND HUMAN SERVICES) 27 June 2002. Claims, page 2 line 22-page 3 line 15	1-3, 26-28, 58-60

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
29 September 2003

Date of mailing of the international search report

8 OCT 2003

Name and mailing address of the ISA/AU

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01133

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5919552 B (MALHOTRA) 6 July 1999 Claim 8	58-76
A	US 5917084 B (JIANG) 29 June 1999 Whole document	1-79
A	Reina M. et al, "Defensive chemistry of Senecio miser" J. Nat. Prod. (2001) Vol 64 pages 6-11 Abstract	1-79
P, A	WO 02/089587 A (BIOPROSPECT LTD) 14 November 2002 Abstract	1-79

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Supplemental Box I

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No:

Claims 1-3, 7-8, 12, 16-28, 32-33, 37, 41-60, 64-65, 69, 73-79 (all partially) do not define the matter for which protection is sought in terms of the technical features of the invention (Rule 6.3(a)). The claims are not restricted to the technical features of the invention, these being identification of natural products with an eremophilone-like structure in oils from Eremophila species featuring certain insecticidal or pest antifeedant/repellant properties and the use of such products in pesticide compositions or on surfaces. The claims include multitudes of compounds not disclosed as being isolated or tested for appropriate activities by the applicant and featuring only a loose structural relationship to the isolated compounds. Furthermore a search that covered all envisaged and claimed compounds proposed the applicant as having similar properties would be uneconomic. For these reasons the claims have only been fully searched in so far as they relate to the particular compounds isolated by the applicant and those claimed derivatives defined with cyclic ketone functionality and having the substituent at location R31 (see claim 4, formula III) limited to an alkyl based group of the type defined for R31. In terms of applications of the compounds the search has been basically restricted to wood associated pests for which there is substantial disclosure of activity, although citations for other claimed applications have been raised where the searcher is aware of them.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/01133

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
WO	2002/50053	AU	45095/2002		
WO	2002/089587		NONE		
US	5919552		NONE		
US	5917084	AU	43258/97	WO	98/00091
				US	6060509
					END OF ANNEX